MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding ("MOU") is effective as of <u>January 17, 2014</u> ("Effective Date") and is between <u>Empire Genomics LLC</u>, a <u>New York</u> corporation with its principal office located at <u>700 Michigan Avenue. Suite 200 Buffalo, NY 14203</u> ("Empire Genomics") and The Research Foundation for The State University of New York ("Foundation"), on behalf of the University at Buffalo ("UB") of The State University of New York, with a principal address of 35 State Street, Albany, New York and a business address of 516 Capen Hall, Buffalo, NY 14260. Empire Genomics and Foundation are sometimes each referred to as a "Party" and together the "Parties".

I. OVERVIEW

- I.1. Under the leadership of Governor Andrew Cuomo, New York State has led the U.S. in multi-billion dollar strategic investments in high technology programs that cover the entire spectrum of clean energy, medical, smart grid and nanotechnology industry needs, from long-term innovative research and development, to workforce development and education, to product prototyping and commercialization.
- I.2. Governor Andrew Cuomo's comprehensive job creation and economic growth agenda for New York State provides strategic investments for job creation in emerging high-tech industries across New York State and fosters critical partnerships between State government, the private sector and New York State's top-flight universities and research institutions, as demonstrated recently by the commitment and growth of UB, together with its public and private university and industry partners.
- 1.3. <u>Empire Genomics</u> is a global technology leader in genomic <u>laboratory</u> testing for use in diagnosing and guiding precise therapeutic treatments for patients with <u>medical</u> conditions.
- I.4. <u>Empire Genomics</u> acknowledges that UB is a critical enabling component in maintaining and bolstering New York State's position as a leader in <u>life sciences</u>, <u>biomedical informatics and high performance computing</u>, and recognizes the mutual benefit that can be attained by: (i) collaborating with UB to bring to the State of New York new research, development, and business investments; and (ii) fostering critical partnerships among the Parties and the public and private sectors.
- I.5. Foundation and UB further recognize <u>Empire Genomics</u> as a valuable collaborator and partner in the development and deployment of current and future <u>laboratory testing</u> innovations and solutions including medical diagnostics applications development and related laboratory solutions.
- I.6. The Parties intend to further build on their innovation, education, and commercialization skills and resources to further establish New York as the global hub for medical diagnostics and related research products and services discovery, innovations, and deployment.
- I.8. The Parties desire to explore making joint investments in the State of New York that focus on (i) research and development ("R&D"); and (ii) <u>market expansion for existing and new products.</u>
- I.9. In view of the foregoing, the Parties will engage in good faith negotiations to execute the terms set forth below. As the Parties embark upon good faith negotiations, they wish to express their fundamental understanding of issues within this MOU. The Parties will not be bound by the terms of this

MOU until such time as the critical issues therein are fully negotiated and documented in a final definitive contract ("Final Contract") signed by <u>Empire Genomics</u> and Foundation, on behalf of UB.

II. OBJECTIVES

II.1. R&D, Business Outreach, and Economic Development Partnership

The Parties intend to establish an R&D and business partnership and economic partnership agreement for <u>creation of innovative medical diagnostics products</u>, <u>services</u>, <u>and Buffalo-based jobs</u>.

II.2. Goals of the Program

To collaborate with UB, including life sciences expertise, biomedical informatics, shared lab resources and high performance computing capabilities, for the purpose of enhancing and creating innovations in medical diagnostics products and services.

To pursue opportunities to create new life sciences jobs in Buffalo, NY.

III. EMPIRE GENOMICS OBLIGATIONS

Empire Genomics commits to working with UB to <u>pursue research and development and market expansion opportunities.</u>

III.1. Investment Targets

<u>Empire Genomics</u> commits to providing in kind planning resources to ensure development of collaborative projects that achieve the goals of the MOU.

III.2. Employment Targets

Empire Genomics commits to use its best efforts to obtain an employment goal of <u>80</u> high tech jobs over the period of 5 years.

III.3. R&D Funding Targets

<u>Empire Genomics</u> commits to work with Foundation, on behalf of UB, to identify additional sources of funding for R&D. Such funding will be generated from public and private funding sources.

IV. FOUNDATION OBLIGATIONS

IV.1. Foundation / New York State Funding

Foundation, on behalf of UB, commits to use its best efforts to obtain \$50 Million in funding from the State of New York, to be administered through Foundation, to provide funding for <u>life sciences expertise</u>, biomedical informatics, shared lab resources and high performance computing infrastructure.

IV.2. R&D Funding Targets

Foundation commits to work with <u>Empire Genomics</u>, on behalf of UB, to identify sources of additional funding for R&D. Such funding will be generated from public and private funding sources.

V. FUNDS

- V.1. Each Party shall be responsible for funding its own activities under this MOU. No funds of either Party are in any way committed or obligated for any purpose whatsoever by virtue of entering into this MOU. This MOU does not identify or require the transfer of funds between the Parties. This MOU shall not be construed to authorize or guarantee funding for any proposals submitted in response to any solicitation, nor shall it be construed as a guarantee of future funding nor shall this MOU be construed as an endorsement of any proposal submitted by any Party or non-Party. A Party's Program activity obligations under this MOU are contingent upon and subject to availability of such Party obtaining funding for such Party to carry out its Program activity obligations under this MOU.
- V.2. Each Party shall bear its own costs and expenses (including those for its attorneys, accountants, bankers, advisers or other agents or representatives) incident to the preparation, negotiation, execution and innovation of this MOU and any agreement and the performance of its obligations hereunder. Each Party shall be responsible for all tax matters, issues or obligations related to the employment of its employees or agents or to the presence of its personal property in any taxing jurisdiction.

VI. FUNDRAISING

The Parties agree to jointly seek funding from public and/or private entities, including federal and state governments and quasi-government agencies and organizations, foundations and private philanthropy and commercial interests, to support and finance job development and resources necessary to establish the state-of-the-art facilities necessary to facilitate job development and for the joint activities as outlined in this MOU. The Parties will consult with each other, in advance, prior to undertaking fundraising activities with third parties pursuant to their joint activities under this MOU.

VII. INTELLECTUAL PROPERTY

Rights in intellectual property created under a separate agreements resulting from this MOU shall be determined in accordance with the terms of the separate agreement. No rights in any intellectual property are conveyed or granted by or under this MOU.

VIII. FINAL CONTRACT(S)

The Parties agree and acknowledge that the precise terms and conditions associated with each activity within the Program and the corresponding use of facilities of the Parties will be governed by one or more Final Contracts that will be separately signed written agreements entered into by Empire Genomics and Foundation on behalf of UB that will detail the precise terms and conditions of such activities, including without limitation the mutually agreed upon rights and obligations of the Parties in regards to technology transfer and intellectual property. The Parties acknowledge that entry into a Final Contract(s) may be subject to a multitude of material conditions precedent, including, but not limited to, each Party's review and approval; successful negotiation of an agreed set of terms and conditions and agreement on the details of the scope of work for joint projects; and successful negotiation of related agreements, if any.

IX. TERM AND TERMINATION

This MOU shall be effective for an initial term of <u>five</u> years following the Effective Date (the "Term"), unless earlier terminated in accordance with this MOU. This MOU may be terminated by either Party 30 days' notice. Any extension of the Term of this MOU must be mutually agreed upon as to terms in writing signed by the Parties.

X. PUBLICATION AND PUBLICITY

Press releases and any publicity or other communication or disclosure by any Party to a non-Party regarding this MOU, the relationship among the Parties, or the negotiation of the proposed Final Contract(s) must be approved by all Parties in writing prior to any such press release, public announcement or other disclosure, excluding any communication to another Party to this MOU or internal within any Party.

XI. CONFIDENTIAL INFORMATION

The Parties agree that confidentiality terms set forth in Schedule A shall govern confidentiality during the Term of this MOU.

XII. USE OF NAME

Nothing contained in this Agreement shall be construed as conferring any right to use in advertising, publicity or other promotional activities any name, trade name, trademark or other designation of either Party (including any contraction, abbreviation or simulation of any of the foregoing) without prior written permission.

XIII. NOTICE

All communications, notices and disclosures required or permitted by this Agreement shall be in writing, shall be provided to the other Party and shall be deemed to have been given at the earlier of the date when actually delivered to the other Party or when deposited in the United States mail, certified or registered mail, postage prepaid, return receipt requested, by hand innovation, by overnight courier service with signed receipt or by facsimile transmission (with written confirmation of receipt thereof), and addressed as follows, unless and until either Party notifies the other Party of a change of address:

To Foundation:

State University of New York Research Foundation

University at Buffalo Capen 516 Buffalo, NY 14260

Attn: Alexander N. Cartwright, PhD, Operations Manager

To Empire Genomics: Anthony Johnson

Empire Genomics, LLC

700 Michigan Avenue, Suite 200

Buffalo, NY 14203

XIV. NO LIABILITY

No Party shall make a claim against, or be liable to, any other Party or its affiliates or agents for any damages, including (without limitation) direct, incidental, consequential, special or indirect, punitive damages or lost profits or injury to business reputation, resulting from the continuation or abandonment of negotiations. A Party's undertaking to develop information or technology and/or acquire personnel or capital assets or other detrimental reliance in expectation of execution of a Final Contract(s) shall be at its own risk and such Party shall not make a claim against any other Party for any such reliance damages.

XV. GOVERNING LAW AND JURISDICTION

This MOU will be governed by and interpreted exclusively under the laws of the State of New York, without regard to its choice of law rules. The Parties will comply with all applicable federal, state and local laws and regulations with respect to this MOU. In case of any dispute concerning or arising out of this MOU that cannot be resolved by the Parties in good faith, such dispute shall be finally settled and venue shall be exclusively held in any appropriate state or federal court in the State of New York. Each Party consents to exclusive jurisdiction and venue of such courts.

XVI. EXPORT CONTROL

No Party will export or re-export the technology, commodities, or software (or the direct product thereof), directly or indirectly, to any countries to which such export is now or hereafter becomes illegal under U.S. export regulations if such Party is in the US or governed by US law or by the laws of any other governing administration.

XVII. MISCELLANEOUS

- XVII.1 No amendment or modification of this MOU shall be valid or binding upon the Parties unless in a writing executed by both of the Parties.
- XVII.2 This MOU may be signed in one or more counterparts, each of which shall be deemed to be an original and all of which when taken together shall constitute the same MOU. Any signed copy of this MOU made by photocopy, facsimile or Adobe PDF format shall be considered an original.
- XVII.3 All agreements drafts, "term sheets", memoranda, if any, and other communications respecting the agreements or activities related thereto prepared or exchanged in the course of negotiations, even if signed by one or all Parties, shall be considered only preliminary and shall not be legally binding unless subsequently incorporated into an amended MOU or Final Contract.
- XVII.4 This MOU represents the complete understanding between the Parties as it relates to the subject matter herein and supersedes any prior and contemporaneous communications, understandings or agreements, oral or written, between the parties as it relates to the subject matter.
- IN WITNESS WHEREOF, each Party has caused this MOU to be signed by its duly authorized representative as follows:

EMPIRE GENOMICS, LLC

THE RESEARCH FOUNDATION OF THE STATE UNIVERSITY OF NEW YORK, ON BEHALF OF THE UNIVERSITY AT BUFFALO

By: Ole	By:
Name: Anthony Johnson	Name: Alexander N. Cartwright, Ph.D.
Title: President/CEO	Title: Operations Manager
Date: 0 1 / 27 / 19	Date: January 21, 2014

Schedule A Confidentiality

Purpose

Each of the Parties may disclose and receive Confidential Information (defined below) from the other Party, for the limited purpose of evaluating the suitability of entering into one or more separate agreements as identified in the MOU (hereinafter referred to as "Purpose").

Disclosure of Confidential Information

"Confidential Information" shall mean all information that is maintained in confidence by a Party ("Owning Party") and is disclosed to or obtained by the other Party in connection with and during the Term of this MOU, including, but not limited to, information that relates to such Owning Party's past, present or future research, development, manufacturing, or business activities. Either Party ("Disclosing Party") may disclose its confidential information to the other Party ("Receiving Party") orally, in writing or by other media or transfer of materials including graphic, photographic, recorded, prototype, sample, or other tangible or permanent form clearly and obviously marked "confidential" or "proprietary". Electronic information will be adequately marked if the container is marked and if a proprietary legend displays when the information runs on a computer system and when the information is printed from its data file.

When disclosed orally, Disclosing Party shall identify the information as confidential at the time of such disclosure, with subsequent written confirmation to Receiving Party within thirty (30) days of such disclosure indicating the date and type of information disclosed. All restrictions provided herein regarding use and/or disclosure shall apply during such thirty-day period.

Protecting confidential Information

Receiving Party will retain Disclosing Party's Confidential Information in confidence for three (3) years from the date of disclosure. Receiving Party will not disclose, disseminate, or publish any of Disclosing Party's Confidential Information to any person except employees or agents of Receiving Party on a need to know basis. Receiving Party shall ensure that such employees or agents shall be bound by terms at least as protective as the terms of this Schedule A. Each Party warrants that employees or agents shall comply with the terms of this Schedule A. Upon the termination or expiration of this MOU, the Parties shall confer regarding the status of Confidential Information disclosed and/or created under this MOU.

All right, title and interest in patents, copyrights, trademarks, data, designs, drawings, blueprints, tracings, plans, layouts, specifications, formulae and any and all other Confidential Information which are furnished to the Receiving Party shall be and remain the exclusive property of the Disclosing Party. The Parties recognize and agree that nothing contained in MOU shall be construed as granting any property rights, by implication, license or otherwise, to any Confidential Information of the other Party disclosed pursuant to the MOU, or to any invention or any patent, copyright, trademark, or other intellectual property.

Each Party agrees to not make, use, sell, offer for sale, or have made, any product or service based upon the Confidential Information provided to it without executing an agreement authorizing such use. Each Party further agrees not to reproduce in any form (except as required to accomplish the Purpose set forth in this Schedule A), analyze, modify, reverse engineer, decompile, create other works from, or disassemble the Confidential Information disclosed to it or any samples of tangible materials included therein.

The Party receiving Confidential Information under this MOU shall be held to the same standard of care in protecting such information as the Receiving Party normally employs to preserve and safeguard its own Confidential Information of similar kind.

Exclusions; Required Disclosure

Receiving Party's obligations regarding Disclosing Party's Confidential Information shall not apply to information (a) that was already known to Receiving Party prior to the disclosure of such information to Receiving Party by Disclosing Party, (b) that is or becomes publicly available through no act or fault of Receiving Party, (c) that is rightfully received by Receiving Party from a third-party having no obligation of confidentiality to Disclosing Party, or (d) that is independently developed by Receiving Party.

In the event the Receiving Party is required by law, regulation, or court order to disclose any of the Disclosing Party's Confidential Information, the Receiving Party will notify the Disclosing Party in writing prior to making such disclosure in order to facilitate the Disclosing Party seeking a protective order or other appropriate remedy from the appropriate legal body. The Receiving Party further agrees that if the Disclosing Party is not successful in precluding the requesting legal body from reviewing the Confidential Information, it will furnish only that portion of the Confidential Information which is legally required and will exercise all reasonable efforts to obtain reliable assurances that confidential treatment will be accorded the Confidential Information.